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Coordinates in R.A. and N.P.D. of the Comparison Stars with reference to R. Carinæ, together with the Adopted Magnitudes of the Comparison Stars.

Comparison Star.	Adopted Magnitude.	R.A.	N.P.D.
		m s	′ ″
No. 1 (Red Star) ...	8·7	1 31·4 E.	26 28 S.
2	9·2	1 32·1	8 5 S.
3	8·6	1 52·0	20 24 N.
4	9·2	2 56·1	0 45 S.
5	8·5	3 8·4	20 13 N.
6	9·2	3 52·6	10 8 S.
7	9·2	4 30·0	9 0 N.
8	8·0	6 4·9	14 41 N.
... ...	9·1	6 46·2	3 52 S.
10	8·0	6 46·8	14 51 N.
11	8·5	7 8·7	27 17 S.
12 (Lacaille 3993) ...	6·9	7 23·5	8 31 S.
13	8·9	8 2·2	12 9 S.
14	8·8	9 34·7	6 54 N.
15	8·6	10 8·0	3 33 N.

Note.—The position of star No. 7 is derived from alignments with the other stars.

Errata in my communications in vol. xliii. of the Monthly Notices of the Royal Astronomical Society.

Page 279. *For* 0ˢ·7 *read* 0ˢ·1.
„ 386. R.A. parallax factor for Oct. 26; *for* −8·7083 *read* −8·7089.
„ 387. Comparison Star for Nov. 14; *for* 31 *read* 35.
„ 389. Comet's App. N.P.D. for Dec. 29: *for* 119° 51′ 19″ *read* 119° 51′ 9·1″.
„ 393. Opposite to Star No. 54; *for* 1880, 3240 *read* 1860, 3240.

Measures of Southern Double Stars. By E. B. Powell.

In the *Monthly Notices* for June 1870, in which appeared my last published elements of the orbit of *α Centauri*, I mentioned my intention of communicating at a later period the details of the double star observations I was then engaged in taking. Circumstances prevented me from carrying out the plan I had formed of securing a considerable number of measures of different southern binaries; and, on my return to Europe in 1875, I thought it scarcely worth while to trouble the Society with the limited number of observations I had taken. As, however, Dr. Elkin applied to me some time ago for my unpublished

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detailed observations of *α Centauri*, it occurs to me that I may as well enable the Society to place them on record, should it appear advisable to do so; I therefore do myself the pleasure of forwarding them. Along with the measures of *α Centauri* are three other southern stars, and a few observations of *η Cassiopeiæ*. The measures now placed before the Society embrace all my Madras results subsequent to those recorded in vol. xxxii. of the *Memoirs*.

Bath, Sept. 24, 1883.

Star.	Pos.	No. Obs.	Dist.	No. Obs.	Epoch.
	°		″		
η Cassiopeiæ	122·7	10	6·42	4	1863·868
	122·8	6			1863·903
	123·6	6	6·63	6	1864·109
	123·6	8	6·78	10	1864·125
Mean	123·1	30	6·65	20	1864·001
	133·15	5			1870·058
	134·17	7	6·28	8	1870·066
	133·4	5	6·3	10	1870·071
	133·45	7	6·5	8	1870·074
	133·1	8	6·45	8	1870·079
Mean	133·4	32	6·39	34	1870·07
	137·6	6	5·9	6	1871·077
	136·96	8			1871·123
Mean	137·4	14	5·9	6	1871·1
p (6) Eridani	250 8	10	5·17	10	1863·004
	251·3	6	4·77	10	1863·015
	250·9	5	4·88	10	1863·02
	250·7	9	4·61	8	1863·029
Mean	250·9	30	4·9	38	1863·017

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Star.	Pos.	No. Obs.	Dist.	No. Obs.	Epoch.	
	°		"			
p (6) Eridani	243·0	6			1870·048	
	243·3	7			1870·063	
	243·2	3	5·55	10	1870·066	
	243·0	7			1870·071	
	242·7	6			1870·088	
	242·8	5	5·74	10	1870·099	
Mean	243·0	34	5·7	20	1870·072	
	241·4	5	5·6	6	1871·005	
	241·4	12	5·2	8	1871·077	
	241·7	10	5·4	10	1871·088	
	241·6	6			1871·09	
	241·5	7	5·8	8	1871·099	
	241·9	5	5·37	8	1871·104	
Mean	241·6	45	5·46	40	1871·077	
γ Centauri	6·2	5			1870·187	Distance about $1\frac{1}{2}''$ or $1\frac{1}{4}''$ by estimation.
	7·4	6			1870·198	
	8·0	5			1870·244	Distance measures beyond telescope.
	6·6	5			1870·252	
	7·65	4			1870·255	
	6·75	8			1870·26	
Mean	6·85	33			1870·233	
	8·1	6			1870·971	
	7·03	6			1871·061	
	6·7	7			1871·073	
	5·7	10			1871·092	
	5·85	7			1871·097	
Mean	6·16	36			1871·059	

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Star.	Pos.	No. Obs.	Dist.	No. Obs.	Epoch.	
	°		″			
α Centauri	1·2	10	7·35	10	1863·004	
	·83	12	7·4	10	1863·009	
	2·02	6			1863·024	
	1·3	6	7·4	6	1863·028	
	·9	10	7·04	10	1863·045	
	2·2	15			1863·056	$3\frac{1}{2}$ wrong; $-\frac{1}{2}$ much worse.
Mean	1·4	59	7·2	36	1863·028	
	5·9	10	7·67	8	1864·002	
	5·6	10			1864·094	
	5·6	8	7·9	8	1864·116	
	5·8	10	7·7	26	1864·121	
	5·6	6			1864·132	
	5·4	10	8·02	10	1864·152	$7\frac{1}{2}$ wrong, but not very bad; $3\frac{1}{2}$ much worse.
	5·9	10	7·9	18	1864·156	
Mean	5·7	64	7·85	70	1864·11	
	11·18	5	8·87	6	1866·056	
	11·2	10	9·5	6	1866·061	
	11·0	9	9·37	10	1866·072	
Mean	11·1	24	9·3	22	1866·063	
	17·9	8	10·6	8	1869·127	
	18·0	14	9·9*	12	1869·138	
Mean	17·97	22	10·4	20	1869·132	

* Distance clipped as much as the eye could bear without being offended. Intended to try on another night how wide a distance the eye could bear, but did not carry out intention. Gave second night only $\frac{1}{3}$ the weight of first night.

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Star.	Pos.	No. Obs.	Dist.	No. Obs.	Epoch.	
	°		″			
α Centauri	21·23	5	10·2	6	1870·012	
	20·7	10	10·29	10	1870·015	
	21·0	5	9·97	10	1870·018	Stars unsteady.
	20·43	15	10·25	32	1870·059	
	19·75	5	10·16	10	1870·067	Stars unsteady.
	20·28	8			1870·07	
	20·23	5	9·99	10	1870·073	Stars at times flaring.
	19·72	10	10·26	10	1870·081	
	20·28	5	10·46	20	1870·083	Stars beautiful.
	20·65	8	10·11	10	1870·187	
	20·27	10	10·38	20	1870·193	
	20·53	7	10·28	14	1870·198	
	21·27	7	10·08	10	1870·242	
Mean	20·45	100	10·24	162	1870·1	
	22·07	5			1870·591	
	21·75	5	9·88	8	1870·599	
	21·83	7	10·07	10	1870·602	
	22·12	5	10·16	10	1870·611	
	21·5	7	10·27	10	1870·635	Daylight.
Mean	21·8	29	10·09	38	1873·608	
	22·98	5	9·9	10	1870·971	
	22·9	5	9·8	10	1870·981	
	23·1	5	9·8	6	1870·984	Stars unsteady. Daylight.
	23·25	6	9·96	18	1871·061	Some night, some day.
	23·29	18	9·77	20	1871·073	Some night, some day. Some E., some W.
	23·33	7	10·0	10	1871·078	
	22·8	20	9·9	20	1871·092	
	22·7	7	9·93	20	1871·094	Daylight.
	23·02	7	10·07	10	1871·097	East.
	22 95	7	9·8	18	1871·102	West.
	23·03	5	9 92	20	1871·105	West.
Mean	23·01	90	9·89	162	1871·05	

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Star.	Pos.	No. Obs.	Dist.	No. Obs.	Epoch.	
	°		″			
α Centauri	23·0	7	9·8	10	1871·215	
	22·7	8	9·83	10	1871·22	
	23·2	5	10·0	6	1871·307	
	24·3	5	9·8	10	1871·32	
	23·8	7	9·9	20	1871·326	Some E., others W.
	24·2	8	9·66	10	1871·389	
	24·9	5	9·9	20	1871·391	
Mean	23 7	45	9·8	86	1871·31	
γ Coronæ Aust.	318·5	6			1863·775	
	317·6	12			1863·849	
	318·8	7			1863·857	
	318·4	5			1863·865	
Mean	318·1	30			1863·836	
	285·5	5			1870·187	Taken with a lower power than usual, and therefore perhaps subject to extra error.
	287·6	7			1870·193	
Mean	286·9	12			1870·19	
	281·9	12			1871·22	

On Humidity as a Cause of Variation of Rate in Chronometers.

By Major-General J. F. Tennant, R.E., F.R.S.

About the end of March, 1882, I borrowed from the Government stores a chronometer by Thomas Fletcher of London, No. 2684; it had been some time in India, but had not been cleaned since its arrival, and was said to have a good rate. When it came to me the rate was about $-6^{s}\cdot5$ (gaining), and this it seemed to keep fairly till the end of May (149^{d}). (I shall use the days of the year frequently, as I can readily take them from my graphic projection of data.) Then the rate suddenly fell to $-2^{s}\,0$ between 150^{d} and 170^{d}, rose nearly a second for a week, and then with small variations continued to fall till about 270^{d}, when it became insensible. At 290^{d} it rose a little, but shortly after I left Calcutta for a short holiday, and missed a period

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